L6 ANSWER 4 OF 5 MEDLINE
ACCESSION NUMBER: 1998219441 MEDLINE
DOCUMENT NUMBER: 98219441
TITLE: Modulation of pro-inflammatory cytokine biology by unsaturated fatty acids.
AUTHOR: Grimble R F; Tappia P S
CORPORATE SOURCE: Department of Human Nutrition, University of Southhampton, United Kingdom.
SOURCE: ZEITSCHRIFT FUR ERNAHRUNGSWISSENSCHAFT, (1998) 37 Suppl 1 57-65. Ref: 39
Journal code: XTU. ISSN: 0044-264X.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
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LANGUAGE: English
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ENTRY MONTH: 199807
ENTRY WEEK: 19980704

AB The production of pro-inflammatory cytokines, such as interleukins 1 and 6 and tumour necrosis factors, occurs rapidly following trauma or invasion of the body by pathogenic organisms. The cytokines mediate the wide range of symptoms associated with trauma and infection, such as fever, anorexia, tissue **wasting**, acute phase protein production and immunomodulation. In part, the symptoms result from a co-ordinated response, in which the immune system is activated and nutrients released, from endogenous sources, to provide substrate for the immune system. Although the cytokine mediated response is an essential part of the response to trauma and infection, excessive production of pro-inflammatory cytokines, or production of cytokines in the wrong biological context, are associated with mortality and pathology in a wide range of diseases, such as malaria, sepsis, rheumatoid arthritis, inflammatory bowel disease, cancer and AIDS. Cytokine biology can be modulated by antiinflammatory drugs, recombinant cytokine receptor antagonists and nutrients. Among the nutrients, fats have a large potential for modulating cytokine biology. A number of trials have demonstrated the anti-inflammatory effects of fish oils, which are rich in n-3 polyunsaturated fatty acids, in rheumatoid arthritis, inflammatory bowel disease, psoriasis and asthma. Animal studies, conducted by ourselves and others, indicate that a range of fats can modulate pro-inflammatory cytokine production and actions. In summary fats rich in n-6 polyunsaturated fatty acids enhance IL1 production and tissue responsiveness to cytokines, fats rich in n-3 polyunsaturated fatty acids have the opposite effect, monounsaturated fatty acids decrease tissue responsiveness to cytokines and IL6 production is enhanced by total unsaturated fatty acid intake. There are a large number of potential cellular mechanisms which may mediate the effects observed. The majority relate to the ability of fats to alter the composition of membrane phospholipids. As a consequence of alterations in phospholipid composition, membrane fluidity may change, altering binding of cytokines to receptors and G protein activity. The nature of substrate for various signalling pathways associated with cytokine production and actions may also be changed. Consequently, alterations in eicosanoid production and

activation of protein kinase C may occur. We have examined a number of these potential mechanisms in peritoneal macrophages of rats fed fats with a wide range of fatty acid composition. We have found that the total C18:2 and 20:4 diacyl species of phosphatidylethanolamine in peritoneal macrophages relates in a positive curvilinear fashion with dietary linoleic acid intake; that TNF induced IL1 and IL6 production relate in a positive curvilinear fashion to linoleic acid intake; that **leukotriene** B4 production relates positively with dietary linoleic acid intake over a range of moderate intakes and is suppressed at high intakes, while PGE2 production is enhanced. There was no clear relationship between linoleic acid intake and membrane fluidity, however fluidity was influenced in a complex manner by the type of fat in the diet, the period over which the fat was fed and the presence of absence of TNF stimulation. None of the proposed mechanisms, acting alone, can explain the positive effect of dietary linoleic acid intake on pro-inflammatory cytokine production. However each may be involved, in part, in the modulatory effects observed.

SO International Journal of Cancer, (1 July, 2000) Vol. 87, No. 1, pp. 95-100. print.
ISSN: 0020-7136.

N 1997:389146 CAPLUS
DN 127:5195
TI Alkylxanthine phosphonates and alkylxanthine phosphine oxides and their use as medicines
IN Billen, Guenter; Okyayuz-baklouti, Ismahan; Anagnostopulos, Hiristo; Muellner, Stefan
PA Hoechst A.-G., Germany
SO Eur. Pat. Appl., 57 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 771813	A1	19970507	EP 1996-116861	19961021
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
DE 19540798	A1	19970507	DE 1995-19540798	19951102
CA 2189222	AA	19970503	CA 1996-2189222	19961030
CN 1158855	A	19970910	CN 1996-122094	19961030
US 5728686	A	19980317	US 1996-741591	19961031
JP 09124671	A2	19970513	JP 1996-305524	19961101

2000321434 MEDLINE
DN 20321434
TI Effect of the specific cyclooxygenase-2 inhibitor meloxicam on tumour growth and cachexia in a murine model.
AU Hussey H J; Tisdale M J
CS Pharmaceutical Sciences Research Institute, Aston University, UK.
SO INTERNATIONAL JOURNAL OF CANCER, (2000 Jul 1) 87 (1) 95-100. Journal code: GQU. ISSN: 0020-7136.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Cancer Journals; Priority Journals
EM 200009

RC261.A1

N 1999:404850 CAPLUS
DN 131:39735
TI Method for inhibiting cyclooxygenase-2 and tumor necrosis factor alpha with modified tetracyclines
IN Amin, Ashok; Abramson, Steven
PA New York University, USA
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9930720	A1	19990624	WO 1998-US26870	19981217

L5 ANSWER 6 OF 24 MEDLINE
AN 2000210706 MEDLINE
DN 20210706
TI Effect of cyclooxygenase and nitric oxide synthase inhibitors on tumor growth in mouse tumor models with and without cancer cachexia related to prostanoids.
AU Cahlin C; Gelin J; Delbro D; Lonnroth C; Doi C; Lundholm K
CS Department of Surgery, Sahlgrenska University Hospital, Goteborg, Sweden.
SO CANCER RESEARCH, (2000 Mar 15) 60 (6) 1742-9.
Journal code: CNF. ISSN: 0008-5472.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English

RC261.A2

5 ANSWER 19 OF 24 BIOSIS COPYRIGHT 2001 BIOSIS
AN 1999:441597 BIOSIS
DN PREV199900441597
TI Expression of IL-1beta, IL-6, TNF-alpha and Cox-2 in the brain of tumor bearing mice with systemic inflammation and progressive anorexia-cachexia.
AU Wang, Wenhua (1); Lundholm, Kent (1); Svanberg, Elisabeth (1)
CS (1) Dept of Surgery, Sahlgrenska University Hospital, Goteborg Sweden
SO Journal of Interferon and Cytokine Research, (Sept., 1999) Vol. 19, No. SUPPL. 1, pp. S153.
Meeting Info.: Meeting of the International Society for Interferon and Cytokine Research with the participation of the European Cytokine Society Paris, France September 5-9, 1999 European Cytokine Society
. ISSN: 1079-9907.
DT Conference
LA English

5 ANSWER 18 OF 24 BIOSIS COPYRIGHT 2001 BIOSIS
AN 2000:188632 BIOSIS
DN PREV200000188632
TI Effect of cyclooxygenase and nitric oxide synthase inhibitors on tumor growth in mouse tumor models with and without cancer cachexia related to prostanoids.
AU Cahlin, Christian; Gelin, Johan; Delbro, Dick; Lonnroth, Christina; Doi, Chiharu; Lundholm, Kent (1)
CS (1) Department of Surgery, Sahlgrenska University Hospital, S-413 45, Goteborg Sweden
SO Cancer Research, (March 15, 2000) Vol. 60, No. 6, pp. 1742-1749.
ISSN: 0008-5472.
DT Article
LA English
SL English

L5 ANSWER 17 OF 24 BIOSIS COPYRIGHT 2001 BIOSIS
AN 2000:333291 BIOSIS
DN PREV200000333291
TI Effect of the specific cyclooxygenase-2 inhibitor meloxicam on tumour growth and cachexia in a murine model.
AU Hussey, H. J.; Tisdale, M. J. (1)
CS (1) Pharmaceutical Sciences Research Institute, Aston University, Birmingham, B47ET UK